Culture Reports and Antimicrobial Susceptibility

Experiment 8 - Practical Notes

Name: _____ Roll no.: _____ Date: _____

Aim

To read a supplied culture and susceptibility report.

Principle

A culture report and susceptibility result must be interpreted using the organism, specimen context, method and valid current interpretive criteria. A larger inhibition zone is not automatically a better clinical drug.

Requirements

- Instructor-prepared fixed slides, labelled images, demonstration records or coded teaching data for this practical.
- Activity form, microscope for prepared slides where applicable and calculator.

Procedure

1. Identify the teaching material

Record the slide, image or data code, method name and the assigned comparison. Use prepared material and supplied results for this exercise.

2. Check the report context

Record coded specimen, reported identification, report status and collection/treatment context supplied.

3. Read susceptibility measurements

Enter zone diameters or MIC values exactly as supplied with units and method.

4. Apply the assigned criteria

Use the current method-specific organism-drug criteria provided for the exercise; do not compare zones across different drugs as a potency ranking.

5. Discuss the clinical limitation

Consider infection site, patient factors and possible colonisation with the supervisor. Laboratory susceptibility alone does not select a complete treatment plan.

6. Assess controls and limitations

Confirm the meaning of the positive, negative, blank or process controls supplied. State which conclusions the results support and which require additional evidence.

7. Complete the record

Enter observations separately from interpretations. Record units, method conditions given with the data and the instructor-reviewed conclusion.

Observations and Record

Record component	Entry
Specimen / organism code	_____
Method and measurement	_____
Assigned interpretive table version	_____
Reported category	_____
Clinical-context questions	_____

Result

Material / data code: ____. Observed result: ____. Control assessment: ____. Interpretation and limitation: ____.

Precautions

- This activity uses prepared material and data interpretation; it is not a live microbial culture or pathogen-handling procedure.
- Keep morphological, quantitative and clinical interpretations separate.
- Use the method-specific assigned quality controls and current interpretive criteria where relevant.

Viva Questions and Answers

1. Can the same zone diameter be interpreted identically for every drug?

No. Interpretation is organism-, drug- and method-specific.

2. Does susceptibility guarantee clinical success?

No. Exposure, infection site, patient factors and the overall treatment plan also matter.

First Hope

COMPLETE NOTES

Click here to visit our website

PHARMACY PRACTICAL NOTES

Complete subject and semesters are available on FirstHope app only.

Scan or click here

Click here to get the app >

Available on Google Play

JOIN THE FIRSTHOPE COMMUNITY

Join our Telegram channel

Click here to join Telegram >

Scan or click here

@FirstHopeNotes

Instagram

@firsthope.official

Click here to follow >

YouTube channel

FirstHope-Pharmacy / Live streams

Click here to watch >

WhatsApp channel

Follow FirstHope on WhatsApp

Click here to join >

FirstHope website

firsthope.co.in

Click here to visit >

B.Pharm / D.Pharm / M.Pharm / Pharm.D

Complete subjects and semesters are available in the FirstHope app.